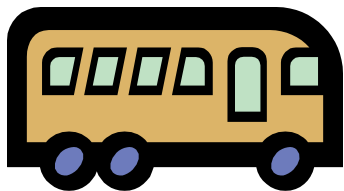


HARTLEY HAPPENINGS

2009-2010

3001 Woodland Ave. Duluth, MN 55803 www.hartleynature.org 218.724.6735 fax 218.724.4891

THE WHEELS ON THE BUS ARE STILL GOING 'ROUND !



BUS SCHOLARSHIPS: HNC has **more busing money in 2009—2010 than ever before**, however funds are limited and available on a first come, first served basis - so book now! Inquire as to availability of funds when making reservations, and note you will be asked to contact the bus company for an estimate. Busing scholarships available to **all visiting groups** in our 30-mile primary service area that utilize commercial transportation. Bus scholarships may be combined with other scholarships.

OTHER SCHOLARSHIPS:

SCHOOL SCHOLARSHIPS: Available to schools with 55% or more of their students qualifying for the government free or reduced lunch program; this scholarship covers the cost of all student participants beyond the \$90 minimum fee for each program. Funds are limited, and on a first come, first served basis.

DONOR SCHOLARSHIP: Available to all schools, your school will be contacted if a donation has been made in your school's name. Scholarships are generally disbursed in the same way as the "School Scholarship" above. Donor scholarships must be spent by the end of the current school year. Unclaimed funds are forfeited to the general school scholarship pot.

FULL DAY & THREE SEASON INCENTIVE: Book full days or multiple seasons and save. See back page.

*Special thanks to the **Donald Weesner Foundation** and the **MN Lake Superior Coastal Program** for their funding of our bus scholarship fund and to the **Ordean Foundation** and private donors who contributed to our school scholarship fund.*

THE BASIC HARTLEY FIELD TRIP What to Expect and How to Prepare

Your field trip is scheduled, permission slips are signed, lunches are on board and the day is off to a great start! What can you expect when you arrive at Hartley Nature Center?

A Hartley staff member will greet you as you exit the bus. The staffer will refer the lead teacher to the front desk before leading the group to their classroom. We will need a final count of participating students, and whether you prefer to pay your fees today or would like to be invoiced. Your invoice address will be confirmed before the lead teacher is sent back to the group, who by now has moved into the building and is settling into the designated classroom.

Classes at Hartley are generally 2 hrs in length (exceptions: preschool; K upon request) and begin indoors with a brief introduction to Hartley Nature Center and the lesson for the day. Following the approx. 20-minute introduction, the larger group is broken into **smaller activity groups** (12-15 students each) to head outside. You can save time by bringing your class to HNC already divided into these smaller groups.

All lessons are seasonally appropriate and will take place outdoors. Lessons conclude in the field and groups meet back at the center to board the bus. In the case of *especially* inclement weather, alternative indoor activities stressing the same themes and concepts will be implemented. HNC will not cancel your booking due to weather. *HNC reserves the right to charge a cancellation fee and/or reschedule a cancelled field trip .*

If your group is having lunch at the center (before or after a class), recycling bins are available and an HNC staffer will give recycling instructions. All lessons can be modified to fit the needs of your group; please let us know about any special needs when scheduling. We look forward to learning with you!

*Hartley Nature Center has a small staff and a group of talented contract teachers to meet the needs of large groups. **If you bring fewer than 80% of the students listed in your reservation and do not call 24 hrs. in advance to adjust your reservation, we must bill for the number included in your original reservation to cover costs of additional contract teachers.***

FIELD TRIP OPPORTUNITIES

| Season | Class | K | 1st & 2nd | 3rd & 4th | 5th & 6th | Upper | |
|--|-----------------------------------|------------------------|-----------|-----------|-----------|-------|---|
| FALL | Birds: Fall Migration | X | X | X | X | X | |
| | Animal Tracks & Traces | X | X | X | X | X | |
| | Life in the Pond | X | X | X | X | X | |
| | Beavers | X | X | X | X | X | |
| | Trees | X | X | X | X | X | |
| | Insects & Spiders | X | X | X | | | |
| | Crayfish Ecology | | | X | X | X | |
| | Geology | | | X | X | X | |
| | Alien Invaders | | | X | X | X | |
| | Weather | | | X | X | | |
| | Stream Study | | | | X | X | |
| | Mission Possible | | | 4th | X | X | |
| | Map & Compass | | | | X | X | |
| | Canoeing | | | | X | X | |
| | Solar Sprint | | | | X | X | |
| | Energy Explosion | | | | X | X | |
| | Green Building | | | | X | X | |
| | WINTER | Birds: Winter Survival | X | X | X | X | X |
| Animal Tracks | | X | X | X | X | X | |
| Beavers | | X | X | X | X | X | |
| Winter Ecology | | | | X | X | X | |
| ** Winter classes occurring in deep snow months will take place on snowshoes (\$1.50 snowshoe fee) | | | | | | | |
| Mission Possible | | | | 4th | X | X | |
| Cross Country Skiing | | | | 4th | X | X | |
| Solar Sprint | | | | | X | X | |
| Energy Explosion | | | | | X | X | |
| Green Building | | | | | X | X | |
| SPRING | Birds: Spring Nesting & Courtship | X | X | X | X | X | |
| | Animal Tracks | X | X | X | X | X | |
| | Life in the Pond | X | X | X | X | X | |
| | Beavers | X | X | X | X | X | |
| | Trees | X | X | X | X | X | |
| | Plants | X | X | | | | |
| | Crayfish Ecology | | | X | X | X | |
| | Geology | | | X | X | X | |
| | Alien Invaders | | | X | X | X | |
| | Weather | | | X | X | | |
| | Stream Study | | | | X | X | |
| | Mission Possible | | | 4th | X | X | |
| | Map & Compass | | | | X | X | |
| | Canoeing | | | | X | X | |
| | Solar Sprint | | | | X | X | |
| Energy Explosion | | | | X | X | | |
| Green Building | | | | X | X | | |

ENVIRONMENT

Birds: Migration, Winter Survival, Nesting & Courtship

Birds class makes a great 3-season course! Explore basic bird biology, identification, and binocular use (size appropriate binoculars for every group), and learn about seasonal bird behaviors through observation and outdoor activities.

Animal Tracks & Traces

Every animal leaves something behind! Be it tracks, scat, fur, or evidence of a home, classes gather clues about the lives of local animals while learning about their adaptations and habitat.

Beavers

Beavers change the world! Change a classmate into a living example of beaver adaptations before hitting the trail to check out habitat and look for signs of beaver activity past and present.

Trees

Classes vary according to your needs: little ones use senses to explore types and parts of trees, while older students identify, measure and age (using a tree borer to count rings) trees on a quest through the forest.

Insects & Spiders

Learn about their bodies, behaviors, and relationships while overturning rocks and logs to catch them in action.

Geology

Learn about the rock cycle, statewide geology and identify the types of rocks in Hartley Park. Study glaciers and their impacts while tracing their movements.

Alien Invaders

There are aliens among us! Investigate the spread of invasive species in the state and in the park, including non-native earthworms and buckthorn. Students will get to pull buckthorn and discuss the impacts of their service efforts on the forest.

Weather

Use thermometers, wind gauges, barometers and meter sticks to take pertinent data and forecast what is to come. Activities help students to understand the water cycle, cloud formation, and larger global weather patterns.

Stream Study

How healthy is Tischer Creek? Students conduct chemical analysis and record temperature, biotic quality and habitat observations to come to a conclusion. Great paired with canoeing.

Winter Ecology

Conduct research in the white stuff, from temperature and structure of snow to its insulating properties. Discover the unique adaptations animals have that allow them to survive during the winter and use the snow cover to their benefit.

Crayfish Ecology

Everybody's favorite omnivore, the crayfish, provides hours of fun as classes take to the streams to identify suitable habitat, meet its fellow water dwellers and search for the sometimes elusive animal. Students measure and sex crayfish to contribute data the HNC Crayfish Database.

Life in the Pond

The pond is full of life, both floating on top and deep in the mud. Use nets, identification sheets and more to catch and identify insect larvae, tadpoles and other pond dwellers.

Plants

This introductory course explores the wide variety of plant life in the park while learning the names of plant parts and functions. Activities include concepts of water transport and pollination, all wrapped up in a fun package including songs, plays and exploration.

OUTDOOR SKILLS

& TEAMWORK

Mission Possible

Combine teamwork, natural history, outdoor skills and adventure in this class designed to engage students in problem solving and community building. Includes group initiatives, map & compass, and ecological concepts in a giant scavenger hunt through Hartley Park.

Canoeing

Learn to paddle on Hartley Pond! This introductory paddle class must be done in conjunction with another 1/2 day environmental class. Rental fee \$1/ student, Full day incentive applies. Limit 30 students each session

Map & Compass

Learn compass basics and try your new techniques in the woods. A wide variety of courses and activities ensure that all skill levels can be accommodated.

Cross Country Skiing

Learn to swish with the best of them in this introductory ski lesson. Class must be done in conjunction with another 1/2 day environmental class. Full day incentive applies. Rental fee \$2/ student. Limit 30 students each session.

SUSTAINABLE

TECHNOLOGIES

Solar Sprint

Construction of model solar cars help students learn the basics of solar power, velocity, acceleration and mechanical advantage. Students build their own cars entirely from post-consumer materials. The class culminates with the exciting **Solar Sprint 500**. Kit cost is \$4/car. Suggest one car per pair of students. Solar panels provided for on-site use and sold separately. Full day incentive applies. Limit 30 students each session.

Energy Explosion!

New for 2009: "The Electron" energy education trailer. Learn about alternative energy sources and conservation at HNC via two hours of activities and demonstrations including solar, wind, biodiesel, hydro and human power. Musical instruments, gadgets, and games make this a great selection.

Green Building

This hands-on course uses experiments and a scavenger hunt to explore our facility's electric and thermal energy systems as well as its emphasis on green building materials. Students use real-time data to gauge performance of the facility's solar array and ground-source heat pump. The class culminates with an interactive presentation focusing on the design and construction of our Executive Director's off-the-grid home.

2009-2010 RATES

| TYPE OF GROUP | LENGTH | COST EACH (OVER MINIMUM) | MINIMUM FEE | DISCOUNTS AVAILABLE |
|--|---|---|-----------------------------------|--|
| School (K- 12 & college) | 2 hours (K may request shorter lesson) | \$4.50/student | \$90 | Bus Scholarship School Scholarship Full day (2 classes)= \$8/student Full day x 3 seasons = \$7/student/day Half day x 3 seasons = \$4/student/day |
| Scouts & Youth Organizations | 2 hours | \$4.50/student | \$90 | Bus Scholarship Full day (2 classes)= \$8/student Full day x 3 seasons = \$7/student/day Half day x 3 seasons = \$4/student/day |
| Early Childhood *** call to request special EC Newsletter | 1 hour | \$4/student | \$40 | Bus Scholarship School Scholarship |
| Chaperone Fee | | 1 Free per ten students All school staff free \$4.50/additional adult | none | |
| Snowshoe Rental, Canoe Rental & Ski Rental | | \$1/student w/program for snowshoes & canoes, \$2 for skis | none | |
| * Travel Fees | | | \$.30/mile/educator | |
| * Mileage Fee | | | \$.55/mile | |
| Energy Explosion on the Move! | 50 minute presentation | | \$270 for first two presentations | \$90 for each additional presentation |

WHEN CALLING 724-6735, HAVE THESE ANSWERS READY:

School Name
Grade & Number of Students
Number of chaperones
(all school personnel free, 1 free parent chaperone per 10 students)
First & Second Choice for Dates
Desired Time
Location: HNC or your site *
Contact Name, Address, Phone
Any special needs of which we should be aware?
Will you bring your lunch or snack to the center?

* we may be able to program at your site

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SERVICE LEARNING OPPORTUNITIES

Hartley provides opportunities for teachers, scout leaders and others to bring groups into Hartley Park for meaningful community service projects. Past projects have included invasive species removal, trash clean-up and native species plantings. Hartley will supply materials and an introduction; group leaders are asked to provide supervision and follow-up to the experience back at school.

Also available: afterschool programming similar to school sessions may be done in conjunction with a service project. Please call for rates and availability of scholarship funds.



hours of operation:
Monday-Friday 9 am-5 pm
Saturday 10 am-5 pm
Sunday 12-5 January-March only

Hartley Park is a city park open
6 am—10pm.
Enjoy hiking, biking & skiing.